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version 4.5
- 2000 Compugen Ltd.
GenCore
Copyright (c) 1993
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AA.

AAG83207 standard; Protein; 1006

AAG83207

- protein search, using sw model

OM protein

September 11, 2002, 12:13:28 Run on:

; Search time 39.17 Seconds (without alignments) 2852.699 Million cell updates/sec

US-09-841-132-190

Perfect score:

1 MASMIGGOOMGRDSSLVPHH.....YEYRDASRGYGLSAGSKVRF 1006 Sequence:

BLOSUM62 Gapop 10.0 , Gapext Scoring table:

747574 segs, 111073796 residues

Searched:

Total number of hits satisfying chosen parameters:

seq length: 0 seq length: 2000000000 Minimum DB Maximum DB

Post-processing: Minimum Match 95% Maximum Match 100% Listing first 45 summaries

A_Geneseq_032802:*

Database

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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SUMMARIES

C. trachomatis pmp C. trachomatis pmp Protein encoded by C. trachomatis LGV Protein encoded by Description AAG83207 AAB13639 AAB13633 AAG83201 AAY16735 22 22 22 20 20 DB Query Match Length 100.0 5238 5231 5094 5094 5090 Result . 8

ALIGNMENTS

Chlamydia polypeptides and fusion proteins useful for preventing pelvic inflammatory disease, trachoma, acute respiratory tract infections, Chlamydia; vaccine; infection; fusion protein; antigen; pelvic inflammatory disease; trachoma; atheroscierosis; heart disease; acute respiratory tract infection; Capl; CT529; OMCB; polymorphic membrane protein; pmp; thiol specific antioxidant; TSA. 180 180 LKNLDNSIAALPLSCFGNLLGSFTVLGRGHSLTFENIRTSTNGAALSNSAADGLFTIEGF 120 The present sequence is provided in a specification relating to compounds and methods for the treatment and diagnosis of chlamydial infection. The compounds provided include polypeptides and fusion proteins comprising immunogenic portions of Chlamydia antigens and DNA sequences encoding such polypeptides. They are useful for vaccinating against chlamydial infection, which causes pelvic inflammatory disease, trachoma, acute respiratory tract infections, atherosclerosis and heart disease. 1 MASMTGGQQMGRDSSLVPHHHHHHHMIPQGIYDGETLTVSFPYTVIGDPSGTTVFSAGELT KELSFSNCNSLLAVLPAATTNKGSQTPTTTSTPSNGTIYSKTDLLLLNNEKFSFYSNLVS GGIAAVQDGQQGVSSSTSTEDPVVSFSRNTAVEFDGNVARVGGGIYSYGNVAFLNNGKTL GDGGAIDAKSLTVQGISKLCVFQENTAQADGGACQVVTSFSAMANEAPIAFVANVAGVRG Length 1006; Indels Protein encoded by Chlamydia trachomatis pmpG gene DB 22; . 0 Skeiky YAW, Fling SP, 100.0%; Score 5238; 100.0%; Pred. No. 0; tive 0; Mismatches Claim 2; Page 214-216; 295pp; English. atherosclerosis and heart disease 2000US-0556877. 2000US-0598419. 99US-0454684 04-DEC-2000; 2000WO-US32919 (first entry) Conservative Chlamydia trachomatis Probst P, Bhatia A, WPI; 2001-374831/39 (CORI-) CORIXA CORP 1006 AA; Best_Local Similarity Matches 1006; Conserv WO200140474-A2 19-APR-2000; 20-JUN-2000; 03-DEC-1999; 05-SEP-2001 07-JUN-2001 Sequence Query Match 61 121 121 181 g q . q ŏ ò ò q ŏ

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Chlamydial infection; sexually transmitted disease; pelvic inflammatory disease; PID; tubal obstruction; infertility; trachoma; blindness; acute respiratory tract infection; atherosclerosis; coronary heart disease; antibacterial.
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The present invention relates to new nucleic acid sequences and the proteins encoded by the nucleic acid sequences. The encoded proteins comprise an immunogenic portion of a Chlamydia antigen. The encoded proteins are useful for the servodiagnosis and treatment of Chlamydia infection. Chlamdiae are intracellular bacterial pathogens that are responsible for a wide variety of human infections. C. trachomatis infection is one of the most common sexually transmitted diseases and can lead to pelvic inflammatory disease (PID), resulting in tubal obstruction and infertility. Trachoma due to ocular infection with C. trachomatis is the leading cause of preventable blindness worldwide C. pneumonia is a major cause of acute respiratory tract infections in humans and is also thought to play a role in the pathogenesis of atherosclerosis and correct in the pathogenesis of atherosclerosis and correct in the pathogenesis of atherosclerosis and the
                                                                                                                                             Isolated polypeptide for diagnosis and treatment of Chlamydia infection comprises immunogenic portion of Chlamydia antigen, which comprises amino acid sequence encoded by polynucleotide sequence
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The present invention relates to new nucleic acid sequences and the proteins encoded by the nucleic acid sequences. The encoded proteins comprise an immunogenic portion of a Chlamydia antigen. The encoded proteins are useful for the servediagnosis and treatment of Chlamydia infection. Chlamdiae are intracellular bacterial pathogens that are responsible for a wide variety of human infections. C. trachomatis infection is one of the most common sexually transmitted diseases and can lead to pelvic inflammatory disease (PID), resulting in tubal obstruction and infertility. Trachoma due to ocular infection with C. trachomatis is the leading cause of preventable blindness worldwide. C. pneumonia is a major cause of acute respiratory tract infections in humans and is also thought to play a role in the pathogenesis of atherosclerosis and
Isolated polypeptide for diagnosis and treatment of Chlamydia infection comprises immunogenic portion of Chlamydia antigen, which comprises amino acid sequence encoded by polynucleotide sequence
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Pred. No. 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       s and fusion proteins useful for preventing petrachoma, acute respiratory tract infections,
                              SKLYLNELRPFVQAEFSYADHESFTEEGDQARAFKSGHLLNLSVPVGVKFDRCSSTHPNK
                                                                                                                                     sklylnelrpfvqaefsyadhesfteegdqarafksghllnlsvpvgvkfdrcssthpnk
                                                                        TQQALCGSYLFGDAFIRASYGFGNQHMKTSYTFAEESDVRWDNNCLAGEIGAGLPIVITP
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19-APR-2000; 2000US-0556877.
20-JUN-2000; 2000US-0598419.
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                                                                                                      QTPTTTSTPSNGT1YSKTDLLLLNNEKFSFYSNLVSGDGGAIDAKSLTVQGISKLCVFQE
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SFSRNTAVEFDGNVARVGGGIYSYGNVAFLNNGKTLFLNNVASPVYIAAKQPTSGQASNT SNNYGDGGAIFCKNGAQAGSNNSGSVSFDGEGVVFFSSNVAAGKGGAIYAKKLSVANCGP

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weight (HMW) protein having an apparent mol. wt. of 105-115 kD as determined by SDS-PAGE. The HMW proteins and nucleic acid molecules can be used for preventing, treating or ameliorating a disorder related to Chlamydia e.g. bacterial infection, conjunctivitis, urethritis, lymphogranuloma venereum (LGV), cervicitis, epiddidymitis, endomerritis, pelvic inflammatory disease (PID), salpingitis, tubal occlusion, cervical cancer, infertility, arteriosclerosis and atherosclerosis. The products can also be used for detection and diagnosis. The present sequence represents a C. trachomatis HMW protein.
                                                                                                                                                                                                                                                                                                                                      Chlamydia; high molecular weight protein; HMW protein; urethritis; bacterial infection; conjunctivitis; lymphogranuloma venereum; LGV; cervicitis; epididymitis; endometritis; pelvic inflammatory disease; PID; salphngitis; tubal occlusion; infertility; cervical cancer; arteriosclerosis; atherosclerosis.
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New Chlamydia protein useful for treating conjunctivitis, ureful to (1,2) \in \mathbb{R}^2
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WLGSNOK INVLKLOLGTKPPANAPSDLTLGNEMPKYGYQGSWKLAWDPNTANNGPYTLKA

NLHLSLSSLLANNAVTNPPTNPPAQDSHPAVIGSTTAGSVTISGPIFFEDLDDTAYDRYD

YQNVTIEQGRIVLREKAKLSVNSLSQTGGSLYMEAGSTLDFVTPQPPQQPPAANQLITLS

DRDALGQGYRYISGGYSLGANSYFGSSMFGLAFTEVFGRSKDYVVCRSNHHACIGSVYLS

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864 870 924 930 984

TQQALCGSYLFGDAFIRASYGFGNQHMKTSYTFAEESDVRWDNNCLAGEIGAGLPIVITP

TWTKTGYNPGPERVASLVPNSLWGSILDIRSAHSAIQASVDGRSYCRGLWVSGVSNFFYH 744

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September 11,

Search completed: Job time: 1117 sec

Gaps 84 90

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Indels

Length 1012;

20; 1; 8

Score 5090; DB Pred. No. 0; 2; Mismatches

97.28;

Query Match 97.2 Best Local Similarity 99.7 Matches 979; Conservative

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NTAQADGGACQVVTSFSAMANEAPIAFVANVAGVRGGGIAAVQDGQQGVSSSTSTEDPVV 264

VLGRGHSLIFENIRTSTNGAALSNSAADGLFTIEGFKELSFSNCNSLLAVLPAATTNKGS 144

GRYEYRDASRGYGLSAGSKVRF 1006

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YSFMAAY ICDAYRT ISGTETT LL. SHQETWTT DAFH LARHGVVVRGSMYASLTSN I EVYGH

SKLYLNELRPFVQAEFSYADHESFTEEGDQARAFKSGHLLNLSVPVGVKFDRCSSTHPNK

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A; Experimental : C; Genetics:
A; Gene: pmpG
                                                                                                                                                                                                       R:Stephens, R.S.; Kalman, S.; Lammel, C.J.; Fan, J.; Marathe, R.; Science 282, 754-759, 1998
A:Title: Genome sequence of an obligate intracellular pathogen of A; Reference number: A71570; MUID:99000809
A; Accession: G71460
                                                                                                                                                                                                                                                                               RESULT 1
G71460
grobable outer membrane protein G - Chlamydia trachomatis (serotype D, strace, Species: Chlamydia trachomatis
C;Species: Chlamydia trachomatis
C;Date: 13-Sep-1998 #sequence_revision 13-Sep-1998 #text_change 08-Oct-1999
C;Accession: G71460
                                                                                                                  A;Cross-references: GB:AE001360; GB:AE001273; NID:g3329342; PIDN:AAC68469.1; A;Experimental source: serotype D, strain UW-3/Cx
                                                                                                                                                     A; Molecule type: DNA
A; Residues: 1-1013 <ARN>
                                                                                                                                                                                     A; Status: preliminary
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                                            KYSFMAAYICDAYRTISGTETTLLSHQETWTTDAFHLARHGVVVRGSMYASLTSNIEVYG
                                                                                  PSKLYLNELRPFVQAEFSYADHESFTEEGDQARAFKSGHLLNLSVPVGVKFDRCSSTHPN
                                                                                                                       STQQALCGSYLFGDAFIRASYGFGNQHMKTSYTFAEESDVRWDNNCLAGEIGAGLPIVIT
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HGRYEYRDTSRGYGLSAGSKVRF
                                   KYSFMGAYICDAYRTISGTQTTLLSHQETWTTDAFHLARHGVIVRGSMYASLTSNIEVYG
                                                                        PSKLYLNELRPFVQAEFSYADHESFTEEGDQARAFRSGHLMNLSVPVGVKFDRCSSTHPN
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Search completed: Job time: 266 sec

September

11,

2002,

12:32:59

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GenCore version 4.5
Copyright (c) 1993 - 2000 Compugen Ltd.
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protein search, using sw model

protein

Run ĕ

٠. September 11, 2002, 12:32:28 on:

; Search time 15.1 Seconds (without alignments) 2579.594 Million cell updates/sec

US-09-841-132-190 5238 Title:

MASMTGGQQMGRDSSLVPHH......YEYRDASRGYGLSAGSKVRF 1006 Perfect score: Sequence:

Scoring table:

BLOSUM62 Gapop 10.0 , Gapext 0.5

105224 segs, 38719550 residues

Searched:

hits satisfying chosen parameters: rotal number of

length: 0 length: 2000000000 sed 8 B Minimum Maximum

Post-processing: Minimum Match 95% Maximum Match 100%

first 45 summaries Listing

SwissProt_40:* Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

084879 chlamydia t Description 95.2 1013 1 PMPG_CHLTR Query Match Length DB Score 1 4986.5 Result œ.

ALIGNMENTS

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16-OCT-2001 (Rel. 40, Created)
16-OCT-2001 (Rel. 40, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Probable outer membrane protein pmpG precursor (Polymorphic membrane
                                                                                                                                                                                                                                                                                                       "Genome sequence of an obligate intracellular pathogen of humans: Chlamydia trachomatis.";
                                                                                                                                                                                                                                                                                                                                                                     (POTENTIAL).
SIMILARITY: BELONGS TO THE PMP OUTER MEMBRANE PROTEIN FAMILY
                                                                                                                                                                                                                                                                                                                                     Science 282:754-759(1998).
-!- SUBCELLULAR LOCATION: CELL WALL SURFACE (ELEMENTARY BODIES)
                                                                                                                                                                                                                            STRAIN=D/UW-3/CX;

BEDLINE-2900809; PubMed-9784136;

Stephens R.S., Kalman S., Lammel C.J., Fan J., Marathe R., Atephens R.S., Calinger L., Tatusov R.L., Zhao Q., Koonin E.
                                                                                                                protein G).
PMPG OR CT871.
Chlamydia trachomatis.
Bacteria; Chlamydiales; Chlamydia.
                         1013 AA
                           STANDARD;
                                                                                                                                                                                                              SEQUENCE FROM N.A.
                                                                                                                                                                              NCBI_TaxID=813;
         PMPG_CHLTR
ID PMPG_CHLTR
AC 084879;
                                                                                                                                                                                                                                                                                          Davis R.W.;
RESULT
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This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch). 1; 503 563 SNLHLSLSSLLANNAVTNPPTNPPAQDSHPAVIGSTTAGSVTISGPIFFEDLDDTAYDRY 623 1 VLGRGHSLIFENIRTSTNGAALSDSANSGLFTIEGFKELSFSNCNSLLAVLPAATTNNGS 150 PVQFLRNIANDGGAIYLGESGELSLSADYGDIIFDGNLKRTAKENAADVNGVTVSSQAIS 443 ATWIKTGYNPGPERVASLVPNSLWGSILDIRSAHSAIQASVDGRSYCRGLWVSGVSNFFY 743 SFSRNTAVEFDGNVARVGGGIYSYGNVAFLNNGKTLFLNNVASPVYIAAKQPTSGQASNT 324 SNNYGDGGAIFCKNGAQ-AGSNNSGSVSFDGEGVVFFSSNVAAGKGGAIYAKKLSVANCG 383 HDRDALGQGYRYISGGYSLGANSYFGSSMFGLAFTEVFGRSKDYVVCRSNHHACIGSVYL 803 VLGRGHSLTFENIRTSTNGAALSNSAADGLFTIEGFKELSFSNCNSLLAVLPAATTNKGS 144 NTAQADGGACQVVTSFSAMANEAPIAFVANVAGVRGGIAAVQDGQQGVSSSTSTEDPVV 264 Gaps Outer membrane; Signal; Multigene family; Complete proteome.
1 27 POTENTIAL.
21 103 PROBABLE OUTER MEMBRANE PROTEIN PMPG.
SEQUENCE 1013 Aa; 107366 MW; F0927743C0A651DD CRC64; LYQNVTIEQGRIVLREKAKLSVNSLSQTGGSLYMEAGSTLDFVTPQPPQQPPAANQLITL ; Score 4986.5; DB 1; Length 1013; ; Pred. No. 4.7e-286; 15; Mismatches 10; Indels 1; EMBL; AE001360; AAC68469.1; -. InterPro; IPR003368; DUF145. InterPro; IPR003357; OMP. Ouery Match Best Local Similarity 97.4%; Matches 957; Conservative 15 Pfam; PF02415; DUF145; 1. Pfam; PF02385; OMP; 1. 145 151 205 211 265 271 325 331 384 391 444 451 511 571 631 691 504 264 684 744 a à g ò q ò q ò g ò g ò g ò οp õ 셤 à 8 ò 8 à ò g à

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OM protein - protein search, using sw model

Run on: September 11, 2002, 12:32:08 ; Search time 40.86 Seconds (without alignments) 4259.249 Million cell updates/sec

Sequence: Title: Perfect score: 1 MASMTGGQQMGRDSSLVPHH.....YEYRDASRGYGLSAGSKVRF 1006 US-09-841-132-190 5238

Scoring table:

BLOSUM62 Gapop 10.0 , Gapext 0.5

Searched: 562222 seqs, 172994929 residues

Total number of hits satisfying chosen parameters:

0

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 95% Maximum Match 100% Listing first 45 summaries

Database : SPTREMBL_19:*
1: sp_archea:*
2: sp_bacteria:*
3: sp_fungi:*

sp_mhc:* sp_invertebrate: * sp_mammal:*

sp_plant:*
sp_rodent:*
sp_virus:* sp_phage: * sp_organelle:*

sp_vertebrate:*
sp_unclassified:*
sp_rvirus:*
sp_bacteriap:*
sp_archeap:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No. Score Query Match Length DB ID

No matches found

Description

Search completed: September 11, 2002, 12:36:59 Job time: 291 sec

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GenCore version 4.5
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September 11, 2002, 12:25:13 ; Search time 17.9 Seconds
(without alignments)
1372.746 Million cell updates/sec

OM protein - protein search, using sw model

Run on:

US-09-841-132-190 5238 1 MASWIGGQDMGRDSSLVPHH.....XEYRDASRGYGLSAGSKVRF 1006 Title: Perfect score: Sequence:

Scoring table:

BLOSUM62 Gapop 10.0 , Gapext 0.5

Searched:

231628 seqs, 24425594 residues

Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 20000000000

Post-processing: Minimum Match 95% Maximum Match 100% Listing first 45 summaries

Issued_Patents_AA:*

1: /cgn2_6/ptodata/2/iaa/5A_COMB.pep:*
2: /cgn2_6/ptodata/2/iaa/5B_COMB.pep:*
3: /cgn2_6/ptodata/2/iaa/6A_COMB.pep:*
5: /cgn2_6/ptodata/2/iaa/6B_COMB.pep:*
5: /cgn2_6/ptodata/2/iaa/PCTUS_COMB.pep:*
6: /cgn2_6/ptodata/2/iaa/PCTUS_COMB.pep:* Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Query Score Match Length DB Result

Description

No matches found

Search completed: September 11, 2002, 12:32:25 Job time: 432 sec

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